

LETS VERIFY



**A SMOOTH, EASY AND EFFICIENT VERIFICATION
PROCESS**

WHAT I WILL COVER

- **Introduction to the project**
- **Research**
- **Best UX practices for forms and verification**
- **Verification types and methods**
- **Data extraction methods**
- **What documents are acceptable**
- **The user's expectations**
- **User journey flow**
- **Prototype**
- **Resources**

INTRO

The Brief

To introduce a new form of user identity validation that will provide more reliable answers and eliminate the need for users to submit additional proof of ID if the verification fails. This check will happen at the point of user registration (on form submit).

The Challenge

The time taken to complete this task is 3 days

The handshake with the new third-party identity check server could take from 3 to 30 seconds. There are two system responses:

- **Success** – The user passes identity verification and the sign-up journey continue as per BAU.
- **Fail** – The system detects some personal info mismatch and blocks the user. We need to inform the user of the error, but we cannot disclose too much information. The user needs to be informed that help and support can be provided for the issue.

RESEARCH

THE STARTING POINT

WHO USES IT?

- **Gambling**
- **Retail**
- **Travel**
- **Payments/Banking**
- <https://www.idenfy.com/>
- <https://www.trulioo.com/>
- <https://www.jumio.com/>
- <https://www.passbase.com/>



GOOD PRACTICE FOR FORM BUILDING

1. Be simple and straightforward
2. Use one column
3. Arrange fields from easiest to hardest
4. Use inline form field validation (next slide)
5. Align text to the left.
6. Clearly title and indicate optional fields
7. Use auto-fill browsers.
8. Address possible user concerns with summary boxes (see image)
9. Use positive and clear error messages
10. Include smart defaults
11. Add progress bars for long forms
12. Use reCAPTCHAs, not CAPTCHAs
13. Enable the ability to tab to next form field
14. Indicate if each field is required or optional
15. Offer radio buttons instead of drop-downs
16. Avoid the “clear fields” button.
17. Offer field focus on mobile devices.



INLINE VALIDATION

There's a lot of empirical support for inline validation. In 2009, Luke Wroblewski tested inline validation against a control (after-submit validation), and even though the sample was small, he found the following results with the inline version:

22% increase in success rates;

22% decrease in errors made;

31% increase in satisfaction rating;

42% decrease in completion times;

47% decrease in the number of eye fixations.



The image shows a form with three input fields: 'First name' (containing 'John'), 'Last name', and 'Email address' (containing 'john.smith@emailaddress.com'). A 'SEND' button is located below the fields. Red error messages are displayed inline next to the 'Last name' and 'Email address' fields, and in a separate box below the 'SEND' button. The error messages are: 'Please provide last name', 'Email address requires an @ sign', 'Please provide 'Last name'', and ''Email address' provided is invalid'.

First name
John

Last name ✘ Please provide last name

Email address
john.smith@emailaddress.com ✘ Email address requires an @ sign

SEND ✘ Please provide 'Last name'
✘ 'Email address' provided is invalid

THE THREE TYPES

Something you are

Commonly referred to as biometrics, uses your own person as a means to verify you. This can include fingerprint scanning, facial recognition and even iris recognition. The method is considered to be gold standard of identity verification as it is the most secure. The downsides of biometrics are the hardware cost associated with fingerprint readers and iris scanners, as well as the challenge of resetting biometrics in the event of compromise.

Something you have

Includes things like your phone or an external device used to generate a code, primarily used for two-factor or multi-factor authentication. This includes receiving an SMS code on a mobile phone, or a hardware authentication device such as a smart card. This identity verification method is the most popular thanks to the relative low-cost for the added security, the accessibility of phone-based methods, and the ability to replace them in the event of compromise.

Something you know

The *something you know* category, also referred to as knowledge-based authentication, can be a password, or security questions only you can answer. This method is the most common, and the least secure. With the age of social media upon us, most answers to security questions are easily accessible through social engineering.

<https://specopssoft.com/blog/identity-verification-best-practices/>

WHAT DATA DO WE NEED?

- Full Name
- Document number
- Expiry date
- Date of birth (DOB)
- Personal ID numebr
- Nationality
- Gender/Sex
- Document issuing country
- Face image

METHODS TO GET THAT DATA

- **Photo (Can be selfie on mobile)**
- **Video**
- **Document Upload (see next slide)**
- **Fingerprint scanner**
- **3D liveliness detection**
- **APIs such as Experian etc.**
- **Security questions and answers**
- **Login through social profiles**
- **SMS and email verification codes**
- **Google Authenticator**
- **Duo Security**
- **RSA SecurID**
- **RADIUS**
- **Social Security number**
- **Push notifications**
- **Fingerprint authentication**
- **QR code-based authentication**
- **Time-based one-time password (SMS/Email)**
- **AD-based security questions**
- **Microsoft Authenticator**
- **Yubikey Authenticator**

WHAT TYPES OF DOCUMENTS ARE ACCEPTABLE?

As we want to keep the user's interaction as swift and easy as possible, we want to aim to get as much data from as little as possible in the first instance (as we are trying to make things easy for the right people). So we aim to get the document that has the most data and is easiest to attain.

Document type	Data contained	Data points	User convenience /5
Driver Licence	Name, Address, Photo, Signature, DOB, Date of issue, Country of issue, Licence No	8	9 (usually to hand)
Resident ID	Name, Address, Country, Country of Birth, ID number, Expiry date, Residence since date, Nationality, Photo	9	8 (Country dependant)
Identity Card	Name, Address, Country, Country of Birth, ID number, Expiry date, Residence since date, Nationality, Photo	9	8 (Country dependant)
Passport	Name, Gender, Country, Nationality, Date of issue/exp, Passport no, Photo	7	7 (have to find)
Utility Bill	Name, Address, Date of issue	3	7 (have to find, now online)

It's important to ensure that the uploaded documents meet acceptable criteria (for example an image shouldn't be less than 150px wide or high)

WHAT TYPES OF DOCUMENTS ARE ACCEPTABLE?

For the UK, the government website has a list of documents that are classed as acceptable:

<https://www.gov.uk/government/publications/proof-of-identity-checklist/proof-of-identity-checklist#proof-of-identity-checklist-for-individuals>

CREATE HURDLES NOT BARRIERS

<https://www.jumio.com/compare/> - This is a great resource for showing the pros and cons of each verification method.

- There needs to be less than minimal room for error, however we want to make sure users are still engaged in seeing the process through to the end. If ID verification is taking too long, chances are new clients will give up and existing ones will become frustrated.
- Strike a good balance, give the user options for what type of documentation to provide, and if that fails, **then** ask for more. As the majority of users will be legitimate, we are trying to make it easy for them.
- If it's too basic there is more risk of the user failing the verification process
- As technology advances, there are numerous developments and evolutions of this process, including intelligent document readers, facial biometrics, fingerprint scanners and more. It is important to stay on top of these advancements to improve the experience.

THE 30 SECOND WAIT

Visibility of system status is one of the most important principles in user interface design.

The user can wait up to 30 seconds for the verification process to complete. Whilst this seems small, this can start to build frustration. In this time we should provide as much detail as possible about what is happening so they 'feel' the progress. Loading pages reassure users that their interactions with the process carry weight and reassures users that the app is working on their request. When done well, loading pages can reinforce your brand, boost user motivation, and delight users.

- Think about video games, when they are loading they often provide hints, animations a loading bar etc.
- Indeterminate indicators visualise an unspecified wait time, while determinate indicators display how long an operation will take. Think progress bar vs spiral animation

"It's easy to overlook this state, and many product designers insert it as an afterthought. But there's a very real burden that comes with setting expectations. When your app is loading data, waiting for an Internet connection, or transitioning to another screen, you must take great care to be mindful of how you represent situations where you're fetching data."

- Scott Hurff, former product designer and lead manager at Tinder, writes about the loading state in the UI stack

PROJECT

TIME TO VERIFY

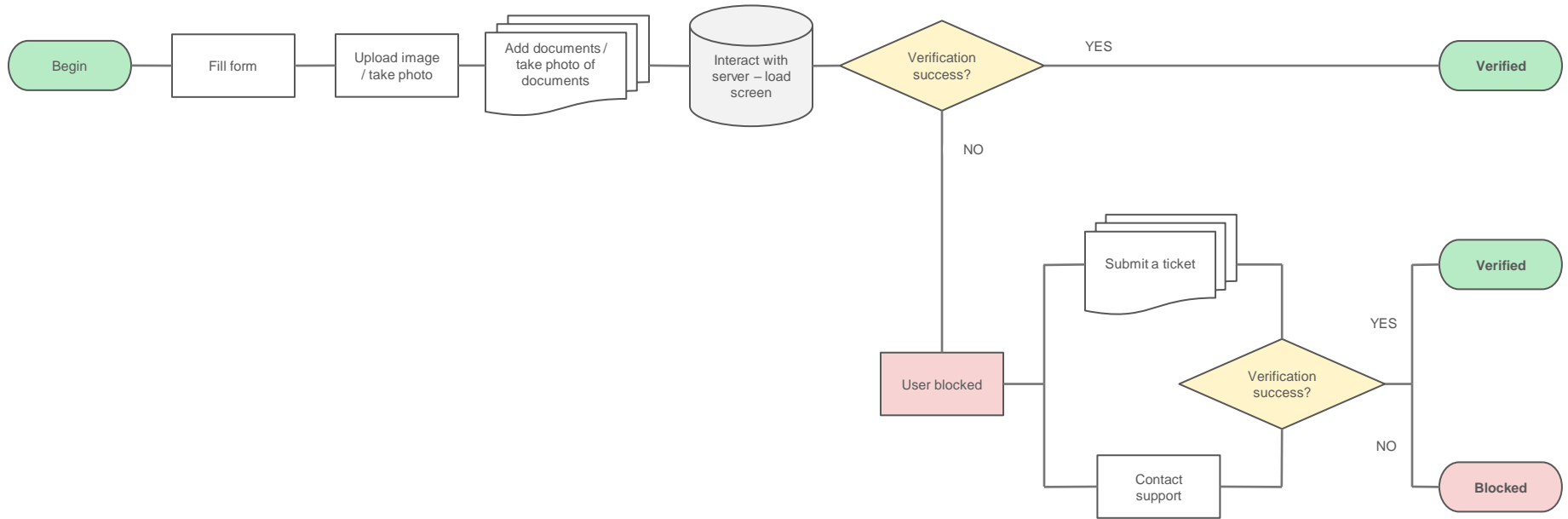
IF THE USER FAILS THE CHECK?

If the user fails, they will be blocked. There will then be two possible issues. The first is the user may get frustrated and lose interest or the user is fraudulent. To tackle both issues, we will need to extract more information as well as keep the user engaged and willing in the process.

Solution:

1. Inform the user of the error using as much information as possible (and allowed)
2. Automatically generate a ticket which has all of the details on it, as well as information on the back end regarding the issues that the user cannot know
3. Ask/give the user the option to upload more data (attach more documents etc) to eliminate back and fourth and then simply press submit which sends both the ticket as well as the additional information to be analysed
4. Provide the user with information regarding support that can help with the issue (preferably immediately actionable support such as a telephone number)


SUGGESTED FLOW



VERIFICATION

Thanks for registering

Almost there...



In order to help you and the rest of our member base feel reassured that every person is who they say they are, we just need to perform a quick verification which shouldn't take more than a few minutes to complete.

Thank you for your understanding.

[Cancel](#) [Start](#)

Step 1: Confirm Details

One Two Three

In order to make this process go as smoothly as possible, please ensure you enter the correct information.

Full legal name as it appears on passport * Required field

Email Address * Required field

Country of residence [Why do I need this?](#)

Confirm Phone Number

1 or more errors on the form, please see any red error text above.

[Back](#) [Next](#)

Step 2: Photo upload


One Two Three

We need a clear, well-lit photo of you. You can either take a selfie or upload an image. Please ensure your face is within the red boundaries.

Select image *

[Choose File](#) Sim3.png

[Upload](#)




[Apply changes](#)

[Back](#) [Next](#)

Processing your details

Please be aware that this process can take up to 30 seconds to complete



[Upload](#)

Extracting details


Analysing images

Analysing documents

[Result](#)

Live Chat

[Back to options](#)



You will be connected shortly.

Your current position in the queue is: 12
Estimated wait time (minutes): 20


If you are waiting too long, don't worry, you can simply request a SMS (text message) to be sent to your phone as soon as your chat is ready. You can also [submit a ticket](#) instead.

[Request SMS alert](#)

Confirm Phone Number

[Submit](#)

Verification unsuccessful



Thank you for submitting your information. Unfortunately there seems to be a slight issue with your verification and your account has been **temporarily blocked**. This could be due to an information mismatch.

Please do not worry, **this can be resolved quickly**

[What can I do about this?](#)

We will need you to contact us using one of these options:

Recommended

[Live chat](#)
Wait - 2 mins

[Call support](#)
Wait - 15 mins

[Submit a ticket](#)
Response - 25 mins

RESOURCES

- <https://www.techadvisory.org/2016/10/whats-the-best-way-to-verify-user-identity/>
- <https://specopsoft.com/blog/identity-verification-best-practices/>
- <https://jungleworks.com/how-to-verify-user-identity-on-an-on-demand-platform-part-one-of-the-user-journey-series/>
- <https://www.manageengine.com/products/self-service-password/active-directory-multi-factor-authentication.html>
- <https://blog.hubspot.com/marketing/form-design>
- <https://cxl.com/blog/form-design-best-practices/>
- <https://www.ventureharbour.com/how-form-length-impacts-conversion-rates/>
- <https://www.thalesgroup.com/en/markets/digital-identity-and-security/government/identity-verification>
- <https://www.appcues.com/blog/loading-pages-design>
- <https://www.smashingmagazine.com/2016/12/best-practices-for-animated-progress-indicators/>
- <https://www.gov.uk/government/publications/dbs-identity-checking-guidelines>
- <https://www.gov.uk/government/publications/proof-of-identity-checklist/proof-of-identity-checklist>
- <https://www.gov.uk/government/publications/identity-proofing-and-verification-of-an-individual/identity-proofing-and-verification-of-an-individual>

END

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